

CLAIMS

1. A method of fabricating a thin-walled print sleeve comprising:
providing a cylindrical support;
applying a fibrous material and a polymer resin to said support to form a thin-
5 walled fiber-reinforced resin base sleeve;
curing said base sleeve;
working an outer surface of said base sleeve to provide a wall thickness of from
between about 0.1 mm to about 0.8 mm;
applying a layer of compressible material to said outer surface of said base
10 sleeve;
applying a layer of material having an imageable surface over said compressible
material to form said print sleeve;
curing said print sleeve; and
working an outer surface of said print sleeve to provide a predetermined overall
15 wall thickness.
2. A method as claimed in claim 1 in which said fibrous material comprises a fiber
strand which is wound onto said support.
3. A method as claimed in claim 1 in which said fibrous material comprises a
woven fabric.
- 20 4. A method as claimed in claim 1 in which said polymer resin is coated onto said
support and said fibrous material is applied to said polymer resin.
5. A method as claimed in claim 3 in which said woven fabric is impregnated with
polymer resin and applied to said support.

6. A method as claimed in claim 1 in which said outer surface of said print sleeve is mechanically ground.

7. A method as claimed in claim 1 in which said base sleeve is formed by pultrusion and said support comprises a forming die.

5 8. A method as claimed in claim 1 in which said compressible layer comprises a sheet material, and said compressible layer is applied to said base sleeve by spirally wrapping said compressible layer around said base sleeve.

10 9. A method as claimed in claim 1 in which said compressible layer comprises a sheet material, and said compressible layer is applied to said base sleeve by wrapping and seaming opposite ends of said compressible layer.

10. A method as claimed in claim 8 in which said compressible layer includes a layer of adhesive on at least the surface in contact with said base sleeve.

15 11. A method as claimed in claim 1 in which said compressible layer comprises an uncured elastomer containing uniformly distributed microspheres, and said elastomer is spread onto the surface of said base sleeve.

12. A method as claimed in claim 10 in which said base sleeve is rotated while said elastomer is spread onto the surface of said base sleeve.

20 13. A method as claimed in claim 12 in which said elastomer is cured in place on said base sleeve.

14. A method as claimed in claim 1 in which said material having an imageable surface comprises a photocurable material in the form of a sheet, and said layer of

photocurable material is applied to said compressible layer by spirally wrapping said sheet around said layer of compressible material.

15. A method as claimed in claim 1 in which said material having an imageable surface comprises a photocurable material in the form of a sheet, and said layer of photocurable material is applied to said compressible layer by wrapping and seaming opposite ends of said sheet.

16. A method as claimed in claim 1 in which said material having an imageable surface comprises a photocurable material, and said layer of photocurable material is applied to said compressible layer by spreading, dipping, casting, or molding said photocurable on said layer of compressible material.

17. A method as claimed in claim 16 in which said photocurable material is applied to said compressible layer while said compressible layer is rotating.

18. A method as claimed in claim 1 in which said material having an imageable surface comprises uncured natural or synthetic rubber in the form of a sheet, and said material is applied to said compressible layer by spirally wrapping said sheet around said layer of compressible material.

19. A method as claimed in claim 1 in which said material having an imageable surface comprises uncured natural or synthetic rubber in the form of a sheet, and said material is applied to said compressible layer by wrapping and seaming opposite ends of said sheet.

20. A method as claimed in claim 1 in which said material having an imageable surface comprises uncured natural or synthetic rubber in the form of an extruded tube which is mounted over said compressible layer.

21. A method as claimed in claim 1 in which said material having an imageable surface comprises uncured natural or synthetic rubber which is spread over said compressible layer.